teenth year suffered a severe injury to the head, causing fracture of the skull with concussion of the brain, necessitating an operation for the removal of depressed bone. From this there resulted alteration of character, headaches, tremor of the hands, and later intolerance toward alcohol. Nine years later, there began a mental disturbance characterized by hallucinations, illusions and delusions of persecution, with later the characteristic symptoms of negativism, verbigeration and stereotypy, which proceeded to moderate dementia. Discussing this case as to its peculiarities, the author discovers some features in the speech and handwriting with dermographism, etc., which suggests a traumatic neurosis, and makes him think that there may be here a combination of this condition with dementia præcox. He believes that trauma is never the sole cause of a neurosis or psychosis, but always plays the rôle of an exciting cause acting upon an already present predisposition. This he thinks well illustrated in this case, and while he inclines to the view that dementia præcox in general is due to an autointoxication of some sort, trauma, he suggests, may have an influence in so disturbing the normal metabolism as to favor the production of harmful substances.

5. *Psychical Condition of the Insane When Dying.*—Walter Albrand, while making certain observations upon the iris movements in the dying, at the Sachsenberg Asylum (already published in another journal), was led at the same time to note the mental condition of his patients. After a review of the subject, with some illustrative cases, he concludes that: In insane persons the improvement in mental condition just before death over that observed in the same individual in bodily health is inconsiderable as a rule. People in general, upon the approach of somatic death, may conduct themselves differently, depending upon the nature of the death bringing disease, but nevertheless their mental processes are apt to move more or less in their formerly accustomed channels. The same thing is usually to be found in the dying insane, the method of death, and the more or less mobile mental condition having a similar effect upon the psychical state as it would have in the sane. A complete alteration in the mental personality of an insane person on his deathbed is never found, but a profound change of mood, both on the approach of death and during severe bodily illness, is undoubtedly sometimes observed, though we can in no way explain this fact. That an insane person, just before death, occasionally abandons his latest idea in favor of earlier ones, and begins, as it were, a new psychical life, is also from time to time noted, but it is impossible to construct a definite antemortal psychopathology. The author makes a digression to discuss the influence of acute febrile diseases upon the mental condition of the insane, and the proposal to utilize therapeutically the occasionally observed curative effect of such processes. With regard to this last, however, he confesses great skepticism, and thinks that in general, infectious diseases are more likely to have an unfavorable than a favorable influence upon the mental condition.

6. *Commitment on Account of Partial Insanity.*—Report of the judgment of an Austrian upper court in a case of this character.

Allen (Trenton).

Brain

(Vol. 28. Parts 3 and 4.)

1. Cerebral Sclerosis. Alfred W. Campbell.
2. The Clinical History and Post-Mortem Examination of Five Cases of Myasthenia Gravis. E. Farquhar Buzzard.
3. Ataxia in Childhood. Frederick E. Batten.
4. On the Metabolism and Action of Nerve Cells. F. H. Scott.
5. The Onset of Hemiplegia in Vascular Lesions. A. Ernest Jones.

1. *Cerebral Sclerosis.*—Dr. A. Campbell contributes a lengthy article on the general pathological aspects of cerebral sclerosis. After some general

notes on neuroglia, its development and growth he takes up tuberose sclerosis, megalocephaly, cerebral hemiagenesis and hemisclerosis, lobar agenesis with sclerosis and microgyria, cerebral arteriosclerosis, giant cell sclerosis and other forms of sclerosis in general paresis, senility, epilepsy, idiocy and that following cerebral softening and syphilis.

He recognizes five neuroglia elements, (1) the large neuroglia cells of Bevan Lewis, Kurzstrahler, of German writers; (2) the stellate cell of Golgi, small spider cell, Langstrahler; (3) glia cells of Retzius; (4) small cell of Bevan Lewis, nucleus; (5) neuroglia cell of Ford Robertson. In reference to the sclerotic processes he holds that for the commoner forms of sclerosis they are brought about by the deposition and metamorphosis of new elements and not by the proliferation of pre-existent cells. The most important of these new cells is the large mononuclear leucocyte or phagocyte. Speaking of tuberose sclerosis he notes that it is almost always confined to idiots and imbeciles, and this suggests to him an intrauterine origin for the cerebral disease which underlies it, which he believes is the ultimate manifestation of some evolutionary aberration or disturbance.

Hypertrophy of the cerebrum is included although sclerosis is usually accompanied by shrinkage. Here, however, there is expansion with marked proliferation in neuroglia elements. The induration and enlargement are general rather than local, and inasmuch as there is little evidence of irritative conditions the process is a unique one. Although comparatively rare, it is common enough to have good material for comparison. There is also a marked hereditary element in these cases, and Campbell inclines to the view that the process leading to the hypertrophy probably was an active one during intrauterine life. Its essential factors are not yet clear. The increase in neuroglia is situated in the white tissues only, and probably took place at the time of the neuronal development of the great systems.

Hemisclerosis, or hemiagenesis, is a rare affection. He believes it to be due to an arrest of growth of one-half of the brain, and the histological evidence tends to show the structures of a foetal brain. The cessation of development probably took place just before or at the time of birth. The elements subserving primary essential functions being developed persist, while those elements subserving higher evolutionary functions, being only partially developed, suffer decay, and hence the neuroglia proliferation and sclerosis. Lobar agenesis is another rare condition, probably similar in its origin, but not so widespread; moreover it is usually bilaterally situated. The author makes a distinction between this process and that of the contraction and induration about an old patch of cerebral softening, and to postmeningitic atrophy and sclerosis. Cerebral arteriosclerosis is next discussed. He believes it not so common among the insane as heretofore thought. He is speaking of gyral attenuation and sclerosis apart from that attendant on gross lesions such as embolism and thrombosis. Gyral arteriosclerosis, he concludes, with atrophy and pitting, is a disease chiefly confined to aged dements with diseased arteries. It attacks the cortex in patches, and apparently is the outcome of a discrete occlusion of cortical arterioles. Colloid sclerosis is an affection of the blood vessels, with a minor participation of glial proliferation. The colloidal material results, the author believes, from a proliferation rather than degeneration. One patient showed a giant cell sclerosis, or infiltration. It might properly be termed a "glioma gangliocellular." Cerebral sclerosis in paresis, in senility, in epilepsy, in hemorrhage, in syphilis, idiocy and multiple sclerosis are briefly considered.

2. *Myasthenia Gravis.*—Buzzard contributes an illustrated paper on this affection based on the pathological findings in five patients. He would maintain from the clinical side that sensory disturbances may be present in this disease, although heretofore they have been considered absent, and he has had one patient with complicating mental symptoms. It is in all probability a disease with a constant morbid anatomy consisting of widely distributed cellular, and sometimes serous, exudations (lymphorrhages) in

the tissues and organs of the body. Slight muscle fiber changes are frequent and severe, muscular atrophy is rare. Proliferative and degenerative changes are frequently, but not constantly, met within the thymus gland. The symptoms, he believes, are best explained on the basis of some toxin having special influence in voluntary muscle and its relations to the thymus are suggested.

3. *Ataxia in Children.*—Batten deals here with some irregular and little known forms of ataxia not included in the well-known groups of Friedreich, and tumor and lesions of the cerebellum and midbrain. He favors the term cerebellar diplegia for his cases, grouping them in three series. (1) Case in which ataxia has been noted early in life, and in which there is a tendency to gradual improvement (congenital cerebellar ataxia). (2) Cases in which ataxia has developed suddenly after some acute illness (acute ataxia, encephalitis cerebelli). (3) Cases in which the child has been healthy until a certain age and then has developed ataxia gradually. These cases resemble Friedreich's, but differ in development (progressive cerebellar ataxia). Particular attention in differential diagnosis must be given to multiple sclerosis, to quiescent cerebellar tumor and to past meningitis and hydrocephalus.

4. *Metabolism and Action of Nerve Cells.*—In this paper Scott tries to solve some of the problems of nerve function by trying to find similar chemical substances in other organs of the body. He finds that a substance of the same nature as Nissl's substance occurs in the cells of the pancreas and in the chief cells of the fundus glands of the stomach. The neurosomes of Held, he holds, are morphologically homologous with the zymogen granules of gland cells, and there is an interdependence between the amount of Nissl substance and the number of neurosomes, exactly as there is between the prozymogen of Macallum and the number of zymogen granules. The nuclei of these three cells also resemble one another. There is also much resemblance in the action of these three cells in that they all are concerned in controlling the changes in proteids. On these similarities the author frames the hypothesis that nerve cells also act by a kind of proteolytic ferment.

5. *The Onset of Hemiplegia in Vascular Lesions.*—The author contributes an extremely interesting paper, which must be read in extenso. Among those conclusions which seem to offer the greatest probability he gives:

(1) Rest in bed, and especially sleep; protect to some extent against cerebral hemorrhage. (2) Severe exertion and time of day appear to have had too much stress laid on them in the past. Time of day is of interest only when the habits of the patient's blood pressure at different hours are known. (3) Consciousness is lost at the onset in half of the cases of occluding lesions and three-quarters of hemorrhage lesions. (4) The immediate prognosis is much graver when the onset is apoplectiform; especially is this so in cases of hemorrhage. Contrariwise, cases of late hemiplegia due to hemorrhage are less likely to have suffered from loss of consciousness at the onset than hemorrhage cases taken as a whole, and are therefore the more likely to be attributed to thrombosis. (5) Intraventricular hemorrhage, which is nearly always secondary, may not cause loss of consciousness. On the other hand, immediate loss of consciousness as the initial symptom may be due to extraventricular hemorrhage. The immediate prognosis is much graver in cases of hemorrhage than in occluding lesions. In 828 cases of hemorrhage, 158 of thrombosis and 273 of embolism the results are as follows: Over 30 per cent. of the cases of hemorrhage were fatal within twenty-four hours; half as many of thrombosis and a quarter as many of embolism; almost two-thirds of the hemorrhage patients are dead in a week, and more than a third of the patients with occluding lesions. Of twenty cases of each lesion four hemorrhagic ones would survive a month; five thrombosis ones and nine embolism ones. Most of those that survive two years are patients with

thrombosis. (7) Of the patients in whom blood is found in the ventricles, 60 per cent. die in the first twenty-four hours and 90 per cent. in the first week. It is not very rare, however, for such cases to live a few weeks. (8) The mortality incident is heaviest on the first day amongst the younger men; in the next few weeks it is the aged women who are most likely to die. (9) There is no indication that hemorrhage affects the right side of the brain more often than the left. Occluding lesions may affect the left side more than the right for all that is known to the contrary, but the statements usually made are not warranted in the present state of our knowledge. JELLIFFE.

Psychiatrisch-Neurologische Wochenschrift

(Feb. 3, 1906.)

1. *Simulation of dementia by Weakmindedness.*—BRESLER. The patient, a woman, had been several times convicted of crime, but the last time she was apprehended she was sent to the asylum. During her examination by the magistrate, and afterward on her admission to the asylum she showed marked mental symptoms, although all those that knew her testified that she was an accomplished rogue. One of the principal features was her marked memory defects. These defects, however, did not follow any type and when she was observed and did not appreciate she was being examined they largely disappeared. Her memory was still poor for recent events though, and this the author thought evidence of weakmindedness, as was also her great tendency to lie. In general her simulation was overdone. The amount of mental defect was too great, as for example, at one time she replied, "I don't know" to all questions.

(Feb. 10-17, 1906.)

1. *Decisions of the Prussian Court in Regard to Caring for the Dangerous Insane.*—Continued.

(Feb. 24, 1906.)

1. Delusion and Error. P. NÄCKE. (Continued.)
2. The Lack of Physicians in Asylums for the Insane and a Hitherto Unobserved Cause for Same. H. HOPPE.
3. Decisions of the Prussian Court in Regard to Caring for the Dangerous Insane. (Continued.)

1. *Delusion and Error.*—Will be abstracted when finished.

2. *Lack of Physicians in Asylums.*—Deals with local conditions only.

3. *Decisions of Prussian Court.*—Not of interest to American readers.

(March 3, 1906.)

1. The Question of the Psychiatric State Asylum. DANNEMANN.
2. Delusion and Error. P. NÄCKE.

1. *Psychiatric State Asylum.*—Continued.

2. *Delusion and Error.*—The article seems to be suggested by a recollection of a fanatical Russian sect, the Duchoborzen, who started out to find Jesus. They were a half clothed, ill-fed, poor, and more or less alcoholic people easily influenced and led. Russia seems to be the land above all others where all sort of possible and impossible sects thrive. Löwenstimm mentions a sect that instead of seeking Jesus sought the devil, and other sects are the Skopzen, Flagellants, Chlyster, Wanderers, Deniers, etc. The belief in witches and demons is not yet dead. All these ideas fixed by suggestion, delusions in the psychiatric sense, are errors only. The distinction is by no means clear. It is said that delusion must have its own special soil and error not, but epidemics of false ideas show this often not to be the case. In both cases there is a special affect state, mood, endogenous or exogenous, conditioned by the surroundings and the time. The delusion develops gradually, the error often suddenly, when the affect reaches a certain tension. The foundation of both may be quite similar. Either may take its origin in the same way—from the Bible or